

ABSTRACT

A system and method for creating a built-in self-testing (BIST) state machine to test random access memories (RAMs) are disclosed. The BIST state machine can be simplified to a simple four-state state machine while accommodating a large group of test suites by programming each state to have the capability of performing one of four necessary operations. These operations include a write operation, a read operation, a read/write operation and a null operation. Further bits and signals can be added to the state machine to enable an even larger array of test suites to be performed.